

STANDARDIZED DESIGNS-MUST BE ADAPTED TO THE SPECIFIC SITE

DR\_AWS\_ABOVE\_8H8D.DW

United States Department of Agriculture

### WASTE STACKING FACILITY

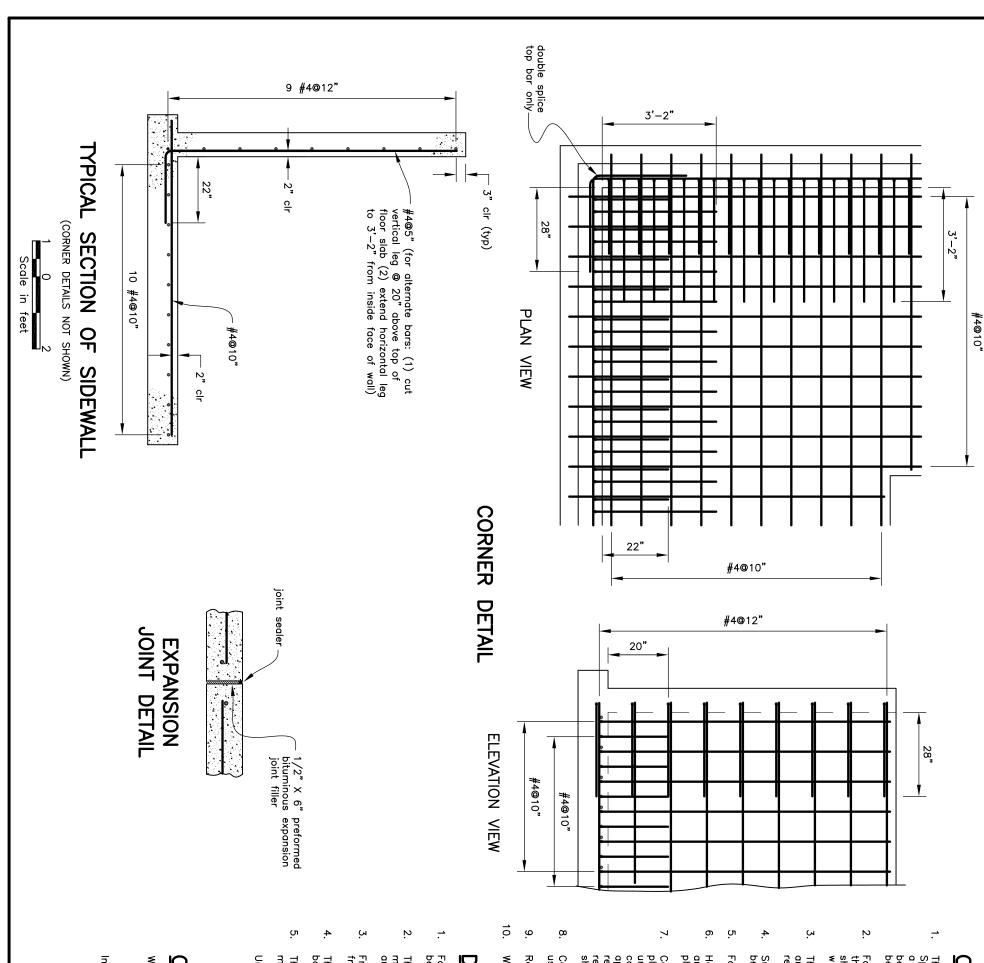
ABOVE GROUND

8' WALL HEIGHT - 8' MAXIMUM STORAGE DEPTH

	Date
Designed B. Doerge, B. Wilson	2/93
<sub>Drawn</sub> kyasumiishi	2/93
Checked	
Approved Roy Bright	12/95
ritle State Engineer	

Job Class

Practice Code\_



### CONCRETE SPECIFIC ATIONS:

- The concrete shall be proportioned, transported, and placed in accordance with Specifications for Structural Concrete for Buildings ACI 301—89. The concrete shall have a minimum compressive strength at 28 days of 3000 psi. Minimum cement content shall be 6 bags/cy and minimum net water content shall be 7 gallons/sack. the slump shall be 2 to 4 inches and the air content shall be 5 to 8% of the volume of concrete.
- Forms shall be mortar tight, substantial and unyielding and shall be constructed so that the finished concrete will conform to the specified dimensions. Metal ties within the forms shall be equipped with a device that permits their removal to a depth of at least 1 inch without injury to the concrete.
- The concrete shall be deposited as closely as possible to its final position in the forms and shall be worked into the corners and angles of the forms and around all reinforcement. Immediately after placement concrete shall be consolidated by vibrating.
- Surfaces of all construction joints shall brush or broom. be cleaned by washing and scrubbing with a wire
- Forms shall not be removed before 24 hours have elapsed after placement of concrete.
- Holes produced by the removal of form ties, cone bolts, etc., shall be cleaned, wetted, and filled with dry pack mortar. Cone bolt holes may also be filled with pre-molded plugs set in epoxy.
- Concrete shall be prevented from drying for placed. The slab and footings shall be kep until curing compound is applied. Moisture covering with plastic sheeting, continuously approved material. The walls shall be thorremoved and shall be kept wet until patchir repairs are made, curing compound may be shall meet the requirements of ASTM C 305 drying for a curing period of at least 7 days after it is all be kept continuously moist for the entire period or Moisture shall be maintained by sprinkling, flooding, tinuously moistened canvas, cloth mats, straw or other least be thoroughly wetted immediately after forms are till patching and repairs are made. After patching and d may be applied in lieu of wetting. Curing compound TM C 309, Type 2.
- Concrete shall not be dropped more used to prevent segregation. than 5 feet vertically unless suitable equipment is
- Reinforcing steel shall be ASTM designation A-615, grade 60.
- Welded wire fabric, if used, shall meet the requirements of ASTM A-185.

# DESIGN NOTES:

- Foundation is to be field investigated t bearing pressure resulting from design to determine adequacy to support structure. loads is approximately 1200 psf. Footing
- The 6 inch layer of compacted crushed rock shall be of angular, clean, well graded material. Compaction shall be by at least one pass of the track or wheel of the loading and spreading equipment over every point in the layer.
- Frost heave potential should be considered on a site—by—site basis. Additiona free—draining rock or other protection methods should be provided as needed. Additional
- The concrete structure is designed for a backfill will be permitted on the outside an internal hydrostatic load of 60 lbs/cu ft. of the wall. ۷ ٥
- The structure is designed according to medium service life (20 year minimum) the criteria in NRCS Practice Standard 313 ģ

## Unless otherwise marked, all splices shall be as follows: Vertical reinforcement #4 - 22" Horizontal reinforcement (in floor) #4-22" Horizontal reinforcement (in walls) #4-28"

CONCRETE VOLUMES:	
Wall and Footing:	
Vol. (cy) = $(2L + W)(0.480 \text{ cy/ft}) - 5.84 \text{ cy}$ = $(2_{} +)(0.480 \text{ cy/ft}) - 5.84 \text{ cy} = \text{ cy}$	
Interior Floor Slab:	
6" floor - Vol. (cy) = 5 (L - 9.17 ft)(W - 18.33 ft) / 54	
$= 5 \left( \frac{1}{100} - 9.17 \text{ ft} \right) \left( \frac{1}{100} - 18.33 \text{ ft} \right) / 54 = \frac{1}{100}$	-
$5^{n}$ floor - Vol. (cy) = 5 (L - 9.17 ft)(W - 18.33 ft) / 324	
$= 5 (_{} - 9.17 \text{ ft})(_{} - 18.33 \text{ ft}) / 324 =$	

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